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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,990	03/28/2005	Hakan Thysell	10400-000119/US	2705

30593 7590 02/29/2008  
HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. BOX 8910  
RESTON, VA 20195

EXAMINER
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RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
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3723

MAIL DATE	DELIVERY MODE
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02/29/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/506,990	<b>Applicant(s)</b> THYSELL, HAKAN	
	<b>Examiner</b> Maurina Rachuba	<b>Art Unit</b> 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07 September 2007 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Martin, 4,887,415 in view of Duncan et al, 6,238,277 and Godfrey et al, 4,513,469. '415, in an automated floor polisher (see abstract, discloses a mobile machine, comprising: a housing, supported by two wheels and a rotatably supported processing disk operatively connected to a motor, two drive motors mechanically connected to the two wheels, respectively; and a control unit influencing the direction of rotation and the rotational speed of the two drive motors. The wheels are co-axially arranged. '415 does not disclose the use of four disks distributed over a planet disk rotatably supported at the bottom of the housing and operatively connected to and drivable by a motor, or that

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the control unit is operatively connected via a radio communications unit designed for manual actuation for remote control of the machine. In a similar device, '227 teaches that it is old and well known to use any number of processing disks, see column 8, lines 25-26, attached to a planet disk that is operatively connected to and driven by a motor. Because both references teach floor processing machines, it would have been obvious to one of ordinary skill in the art to have substituted the four processing disks and planetary drive system of '227 for the drive system of '415, for the predictable result of effectively processing a floor surface. Further, '415, while teaching individual motors and control for the driving wheels, does not teach that the motors are controlled via radio communications. In a controlled floor processing device, '469 teaches controlling the motor driven wheels via radio communications. Because both references teach floor processing devices, it would have been obvious to one of ordinary skill to have substituted the control of '415 with the radio communications taught by '469, to allow operator control of the device without the operator having to physically contact the device, and without the need for complex sensors to control the device around obstacles, see '469, column 1, lines 16-20. Regarding claim 3, '415 does not disclose that the ground support consists of two coaxial wheel arrangements and four rotatably supported grinding disks. '277 teaches such a device, including the ground support consisting of two coaxial wheel arrangements and any number of grinding disks. Because both references teach machines for processing flooring surfaces, it would have been obvious to one of ordinary skill to have provided '415 with the ground support taught by '277, for the predictable result of providing a lightweight, yet stable machine.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

5. The examiner has continued to rely on the teachings of Duncan and Chen to modify the teachings of Martin as set forth above, and will therefore address applicant's arguments against combining the teachings of Duncan and Chen. Applicant argues that there is no motivation or suggestion to modify Duncan with Chen, as they teach different machines for different environments and operations. The examiner strongly disagrees. Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art. Here, both references clearly teach machines that are required to traverse a floor surface. Both machines work in dusty or dirty environments, albeit Chen may work with a lesser amount of dust. One of ordinary skill would find the results of combining Martin, Duncan and Chen predictable, in that the device of Martin would be efficiently controlled to traverse a floor surface. Further, it would have been predictable to one of ordinary skill to have provided Martin with the teachings of Duncan and Chen to provide four grinding disks on a planetary disk, to orbit the tools about an axis, to more efficiently surface the floor.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. Rachuba/  
Primary Examiner, Art Unit 3723